

Laboratory

NICOTINE

Agent Overview: Nicotine comes primarily from the plant *nicotiana tabacum*. Signs and

symptoms of oral nicotine poisoning mimic those for nerve agent or organophosphate poisoning and include excess oral secretions, bronchorrhea, diaphoresis, vomiting (common, especially among children), diarrhea, abdominal cramping, confusion, and convulsions. Although tachycardia and hypertension are common, bradycardia and hypotension might also occur following a severe poisoning. Nicotine or cotinine (the nicotine metabolite) can be detected in urine, serum, or plasma, or environmental samples by some commercial laboratories.

Lab Specimen Submittal: Authorization by Dr. Jane Getchell, Director DPHL; Christina

Pleasanton, Deputy Director DPHL; or Tara Lydick, Chemical

Terrorism Coordinator.

Type of Specimens <u>Urine</u>: 25mL-50mL screw-cap container

Necessary for Testing: Whole blood:

- Three, 5 or 7 mL purple-top (EDTA) tubes (vacuum fill only) AND

- One, 5 or 7 mL gray-top or green-top (vacuum fill only) AND

- Two empty urine cups and two empty blood tubes for each lot #

submitted.

Packaging Instructions: <u>Urine</u>: freeze specimen upon collection and ship on dry ice; label

specimens and package individually; wrap with absorbent material.

Whole blood: place filled tubes in a shipping rack for stability, wrap the

tubes in absorbent material, and secure with tape. Place the

packaged tubes in a secondary unbreakable container. Specimens

may be shipped cold but *must not* be frozen.

<u>All:</u> wrap sample containers and layers with tamper-proof, waterproof forensic evidence tape initialed by collector, being careful not to cover the sample labels. Ship to DPHL as Biological Substance, Category B

(Packing Instruction 650).

Receiving Specimens

at DPHL:

Authorized specimens are received at the lab's rear (loading dock) entrance. Submitters must present ID and complete proper forms.

Handling of Specimens: Chain of custody procedures must be followed. Urine specimens

should be frozen upon collection.

Reporting Results: Reference laboratory will notify DPHL as soon as possible. The

Potential Exposure Call Log and Information form will provide information for notification of testing results outside of the DPHL.

Contact Information: Jane Getchell, DrPH, Director DPHL, 302-223-1520 (24/7 coverage)

24/7 Emergency Contact Number: 1-888-295-5156

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